Applied Science Proposal Writing Review

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Take-Aways

- **READ THE ENTIRE SOLICITATION**
- **APPLICATION READINESS LEVELS (ARLS) ARE A TOOL TO MEASURE PROGRESS FOR APPLIED SCIENCE PROJECTS**
- **READABILITY IS NOT AN OFFICIAL REVIEW CRITERIA BUT CAN BE THE MOST IMPORTANT CRITERION**
- **NASA SCIENCE AND OBSERVATIONS SHOULD BE AN ESSENTIAL ELEMENT OF THE PROPOSAL**
- **STAKEHOLDERS SHOULD BE INVOLVED IN A SUBSTANTIAL WAY**
- **DEMONSTRATE KNOWLEDGE OF THE STAKEHOLDER'S DECISION MAKING PROCESS**
- **VOLUNTEER TO BE A REVIEWER**

The Solicitation

- **READ THE ENTIRE SOLICITATION**
  - **Review the Program Objectives**
  - **Carefully read the "Scope"**
  - **Review the Evaluation Criteria**
    - **NRA Guidebook:** http://www.hq.nasa.gov/office/procurement/nraguidebook/proposer2017.pdf
      - *…Unless otherwise specified in the NRA, the principal elements (of approximately equal weight) considered in evaluating a proposal are its relevance to NASA's objectives, intrinsic merit, and cost….*
    - **Remember: The Program Element takes precedence over the Guidebook**
    - **Most Applied Science solicitations often add evaluation criteria**

NASA Applied Science Objectives

- The **Applied Sciences Program** promotes and funds activities to discover and demonstrate innovative uses and practical benefits of NASA Earth science data, scientific knowledge, and technology.

- The Applied Sciences Program partners with public and private organizations on ways to apply data from NASA's environmental satellites and scientific findings in their decision-making activities and services, helping to improve the quality of life and strengthen the economy.

NASA Water Resource Application Objectives

The NASA Water Resources Program:
The water resources program addresses concerns and decision processes that are related to water availability, water forecast, and water quality. The goal of the Water Resources theme is to apply NASA satellite data to improve the Decision Support Tools (DSTs) of user groups that manage water resources. The Water Resources theme partners with Federal agencies, academia, private firms, and international organizations.

Water Resources Projects:
The water resources projects are organized into several categories; water quality, water delivery and irrigation, flow and flood forecasting, drought, snowpack and climate and water resources.

Programmatic Activities:
The program support national and international activities to improve skills, share data and applications, and broaden the range of users who apply satellite data and Earth science in water resource decisions. The Program also manages the Western Water Application Office (WWAO) coordinated at JPL for NASA HQ.

NASA Western Water Applications Office (WWAO)

NASA Applied Sciences Initiative that is accelerating the application of NASA observations and scientific analysis techniques to tangible, important, and timely water management problems

- Support existing efforts by federal, state, local agencies and partners who are managing water in the western US, and provide a more accessible entry point to NASA capabilities
- Decision-maker / applications needs drive project scoping and design
- Begin planning discussions for transition early in project
- Apply a more formal "project" approach to application implementation

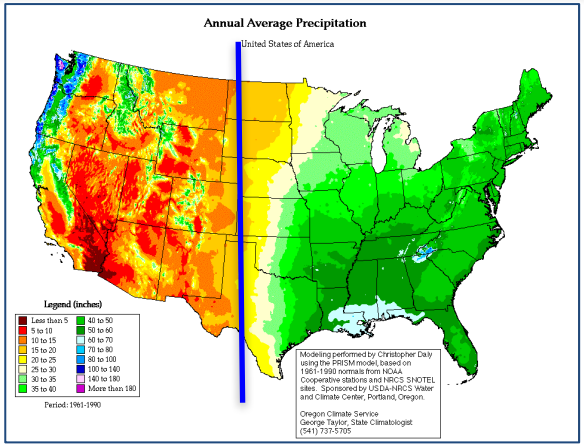

Figure 1 - *A 30-year climatology of annual U. S. Precipitation. The red line denotes the 100th meridian. (Source: C. Daly, Oregon State University)*

Department of Interior (DoI) defines the Western US as states that are on or west of the 100th meridian and encompasses the states represented by the Western Governor's Association (WGA). It is roughly the divide between the "wet" east and the "dry" west

Contact WWAO water.applications@jpl.nasa.gov

appliedsciences.nasa.gov

NASA Food Security and Agriculture Application Objectives

The NASA Food Security and Agriculture Program:
The Food Security and Agriculture Program goals include the use of EO for increased food security and resiliency, reduced price volatility and vulnerability, and improved awareness and understanding of the applications of NASA's and other satellite data products by users from a wide range of sectors. By partnering top researchers, humanitarian aid organizations, economists, policymakers, agribusiness, the financial sector, defense, intelligence, high tech, and other disciplines and sectors to accomplish these goals. EOFSAC activities will have a strong emphasis on operational transition of R&D. Through a Consortium approach, we can strengthen current and foster new linkages and relationships between previously unconnected communities, creating new opportunities for knowledge creation and dissemination.

EOFSAC Coordinated by the University of Maryland Center for Global Agricultural Monitoring Research – Program Lead: Inbal Becker-Reshef
http://www.eofsac.org

NASA Food Security Program Office – GSFC – Coordinator Sean McCartney
https://science.gsfc.nasa.gov/610/applied-sciences/nasa_food_security_initiative.html

ARLs (Don't Overanalyze)

The Review

- Reviewers are NOT paid
- Reviewers read multiple proposals
- Reviewers have a breadth of experience
- Reviewers are decision makers AND scientists
- Reviewer's do what you do
- Reviewers must read, analyze, and present your proposal to other reviewers
  - Readability and organization!

Take-Aways

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- APPLICATION READINESS LEVELS (ARLS) ARE A STANDARD FOR APPLIED SCIENCE PROJECTS
- READABILITY IS NOT AN OFFICIAL REVIEW CRITERIA BUT CAN BE THE MOST IMPORTANT CRITERIA
- NASA SCIENCE AND OBSERVATIONS SHOULD BE AN ESSENTIAL ELEMENT OF THE PROPOSAL
- DECISION MAKERS SHOULD BE INVOLVED IN A SUBSTANTIAL WAY
- BE CAREFUL ABOUT OVERSTATING THE IMPACT OF THE PROPOSAL
- VOLUNTEER TO BE A REVIEWER
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